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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,972	11/30/2000	Rich Rogers	COMP:0084	5616

7590

09/21/2004

Intellectual Property Administration  
Legal Department M/S 35  
PO Box 272400  
Ft. Collins, CO 80527-2400

EXAMINER
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ABDULSELAM, ABBAS I

ART UNIT	PAPER NUMBER
2674	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/727,972

Applicant(s)

ROGERS ET AL.

Examiner

Abbas I Abdulsalam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see # 11, filed 06/25/04, with respect to the rejection(s) of claim(s) 1-32 under U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Rosenberg (USPN 6693626).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Powers et al. (USPN 6460103) in view of Acevedo (USPN 5818361) and Rosenberg (USPN 6693626).

Regarding claims 1, 6, 15 and 23, Powers teaches a keyboard (14) including features of the keyboard for rapidly responding to routine software requests. See col. 5, lines 9-11. Powers teaches at least one application launch Key (68) actuation of which causes a high level interrupt for opening or launching a specific user-configurable software applications. Powers also teaches that each of the keys carries an icon and further teaches rapid response keys (82, 84, 86, 88), which are additional special keys with specific purposes responding to a software request according to their assigned functions. See col. 6, lines 12-26, Fig 3A and Fig 4. In addition,

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Powers teaches the keyboard in connection to the computer console, a rapid Internet access array (70) a CPU (10), and a monitor (12). See col. 5, lines 55-57, Fig 2 and Fig 3A. However, Powers does not teach a keyboard including a display configurable to display a plurality of icons.

Acevedo on the other hand teaches a display-keyboard (10), which includes a plurality of LCDs (20) or LEDs (20), with each display positioned adjacent to an associated key such that among other things icons abbreviations are utilized in the display. See col. 4, lines 1-7, 61-64, Fig. 2 and Fig. 4.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Powers' keyboard to adapt Acevedo's keyboard-based multiple LCDs (20). One would have been motivated in view of the suggestion in Acevedo that the LCDs (20) as configured on Fig. 2 are the same as the desired Keyboard-mounted display. The use of LCDs (20) on a keyboard helps a display-keyboard system as taught by Acevedo.

Powers has been described above. However, Powers does not teach transmitting the icon from the monitor to the keyboard.

Rosenberg on the other hand teaches a haptic keyboard device (12) and host computer as shown in Fig. 6 in which a microprocessor (210) can receive signals from sensor (212) and provide signals to actuator (66) in accordance with instructions provided by host computer (14) over bus 20.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Powers' keyboard system to adapt Rosenberg's host processor (200) along with haptic feedback including the use of sensor (212). One would have been

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motivated in view of the suggestion in Rosenberg that through the host processor (200) along with haptic feedback as configured in Fig. 6, transmission of the icons from the monitor to the keyboard could equivalently take place. The use of a host processor helps function a haptic feedback keyboard as taught by Rosenberg.

Regarding claims 2, 11, 22 and 30, powers a circuitry including a CPU connectable to a monitor (12) for displaying graphical information to a user of the system. See col. 4, lines 2-3.

Regarding claims 4, 13, 19 and 27, see Powers' Fig 1 (132).

Regarding claims 5 and 14, Powers' teaches the use of Microsoft windows in various forms. See col. 7, lines 1-7.

Regarding claim 7, Powers teaches the use of a network access device (NAD) (36) in connection with PCI bus (30). See col. 4, 35-37.

Regarding claims 8, 16 and 24, Powers teaches a rapid Internet access array (70). Fig 3A.

Regarding claims 9, 18 and 26, see Powers' Fig 1 (16).

Regarding claims 10, 21 and 29, see Powers' Fig 1 (18).

Regarding claims 17 and 25, Powers teaches the use of windows 95/98 as an operating system. See col. 7, lines 1-3.

Regarding claims 20 and 28, Powers teaches the use of rapid response keys (82, 84, 86, 88). See Fig 4.

Regarding claim 32, Powers teaches the use keys which correspond to responses to routine software requests. See col. Col. 2, 18-22.

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3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following art is cited for further reference.

U.S. Pat. No. 6,232,960 to Goldman

4. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Abbas Abduselam** whose telephone number is **(703) 305-8591**. The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached at **(703) 305-4709**.

**Any response to this action should be mailed to:**

Commissioner of patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314**

Hand delivered responses should be brought to Crystal Park II, Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology center 2600 customer Service office whose telephone number is **(703) 306-0377**.

Abbas Abduselam

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Examiner

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September 17, 2004

  
XIAO WU  
PRIMARY EXAMINER